

PATENT ABSTRACTS OF JAPAN

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(54) PORTABLE RADIO TELEPHONE SET

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a portable radio telephone set whose storage battery has not basically to be charged by an external power supply.

SOLUTION: A power supply part 2 of a portable radio telephone set 1 consists of a power generating means 2a and a storage battery 2b. The battery 2b is usually used and then charged by the means 2a after the telephone 1 is used for a fixed time.

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CLAIMS

[Claim(s)]

[Claim 1]A portable wireless telephone building in a power generation means.

[Claim 2]The portable wireless telephone according to claim 1 constituting so that a storage battery may be charged by the above-mentioned power generation means.

[Claim 3]The portable wireless telephone according to claim 2 constituting so that the above-mentioned power generation means may be started by the above-mentioned storage battery.

[Claim 4]The portable wireless telephone according to claim 2 constituting said storage battery so that two or more small storage batteries may be comprised and this small storage battery may be connected in series in parallel at the time of discharge at the time of charge.

[Claim 5]The portable wireless telephone according to claim 1 having a means for said power generation means to comprise a manual type dynamo, and to send a predetermined SOS call at the time of an operation of this manual type dynamo.

[Claim 6]A portable wireless telephone constituting so that a power generation means may be built in and this power generation means may be started by a dry cell.

[Claim 7]The portable wireless telephone according to claim 6 having had two or more above-mentioned dry cells, having switched each dry cell one by one, and constituting so that it may be used.

[Claim 8]A portable wireless telephone building in a power generation means and using this power generation means, a storage battery, or a dry cell as a power supply of a circuit different, respectively.

[Claim 9]The portable wireless telephone according to claim 8 constituting the above-mentioned storage battery or a dry cell so that it may have more than one and may be used one by one, switching each storage battery or a dry cell.

[Claim 10]A portable wireless telephone having a means switched to the 2nd storage battery of the above, or a dry cell when an output level of the 1st storage battery and the 2nd storage battery or a dry cell, and the 1st storage battery of the above was monitored, this 1st storage battery was used as a power supply

when this output level was beyond a predetermined value, and below a predetermined value became.

[Claim 11]The portable wireless telephone according to claim 1, wherein said power generation means comprises two or more kinds of power plants.

[Claim 12]A portable wireless telephone building in a power generation means and a dry cell and using one [the both or] power output.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention]This invention relates to improvement of the power supply of a portable wireless telephone.

[0002]

[Description of the Prior Art]As everyone knows, the portable wireless telephone is using the storage battery as the power supply, and after fixed time use must usually be charged from AC/100V domestic power supply.

[0003]

[Problem(s) to be Solved by the Invention]However, when it does not forget to

charge or the power supply for charge is not acquired, it becomes unusable and will be troubled very much. Then, the purpose of this invention is to provide the portable wireless telephone which made the power supply for external charge unnecessary fundamentally.

[0004]

[Means for Solving the Problem]In order to attain the above-mentioned purpose, a portable wireless telephone of this invention makes it a gist to have built in a power generation means. Two or more kinds of power plants may be used for this power generation means.

[0005]In this invention, it may constitute so that a storage battery may be charged by the above-mentioned power generation means.

[0006]Let it be a gist to have constituted so that the above-mentioned power generation means might be started by the above-mentioned storage battery in this invention.

[0007]Or in this invention, said storage battery may comprise two or more small storage batteries, and it may be constituted so that this small storage battery may be connected in series in parallel at the time of discharge at the time of charge.

[0008]In this invention, said power generation means comprises a manual type dynamo, and makes it a gist to have a means to send a predetermined SOS call

at the time of an operation of this manual type dynamo.

[0009]This invention can build in a power generation means, and it can also constitute it so that this power generation means may be started by a dry cell.

[0010]In this case, it may have two or more above-mentioned dry cells, and it may constitute so that it may be used one by one, switching each dry cell.

[0011]This invention can build in a power generation means and this power generation means, a storage battery, or a dry cell can also be used for it as a power supply of a circuit different, respectively.

[0012]In this case, it may be made to use them for each storage battery or a dry cell, having two or more above-mentioned storage batteries or dry cells, and switching one by one.

[0013]Or if this invention monitors an output level of the 1st storage battery and the 2nd storage battery or a dry cell, and the 1st storage battery of the above, it uses this 1st storage battery as a power supply when this output level is beyond a predetermined value, and below a predetermined value becomes, it can also consist of means switched to the 2nd storage battery of the above, or a dry cell. One [the both or] power output may be used using a power generation means and a dry cell.

[0014]

[Embodiment of the Invention]Drawing 1 shows one example of this invention. In

the figure, 1 is a portable wireless telephone, 2 is the power supply section, and this power supply section 2 can use various things, such as the publicly known power generation means 2a, for example, a solar cell, a permanent magnet type generator, a small fuel cell, and a body temperature dynamo. Here, when using especially a fuel cell, it is good to consider it as the structure where hydrogen gas and oxygen gas for fuel may be poured in like a gas cigarette lighter. Or the power generation means 2a comprises the sized generator in which a manual start is possible, and the size motor which drives this, and starts a sized generator, and it may be made to drive a motor by the generation output. The above-mentioned motor is magnetized and it may be made to make it start with the output of a solar cell.

[0015]Drawing 2 is other examples of this invention, and constitutes the power supply section 2 from the power generation means 2a and storage battery 2b. In this case, it is good to have composition which uses storage battery 2b as a regular power supply, and charges by the power generation means 2a after fixed time use. For that purpose, the output level of storage battery 2b is monitored, and the fall of an output level reaches constant value in the control section 1a of the telephone 1, or the power generation means 2a is operated after fixed time, and it is made to charge storage battery 2b.

[0016]If the low thing of electric generating capacity like a solar cell is used as

the power generation means 2a, two or more storage batteries of small capacity will be used for storage battery 2b, it is parallel at the time of charge, and it will be made in-series at the time of discharge (at the time of use), and it will obtain necessary electric power.

[0017]Drawing 3 is an example of further others of this invention, and constitutes the power generation means 2a from size motor 2a₁ and permanent magnet type generator 2a₂. If the dispatch button 1b of the telephone 1 is pushed, it will magnetize with storage battery 2b, size motor 2a₁ will start, and dynamo 2a₂ will be driven and generated. Henceforth, since telephone and motor 2a₁ uses this generated output as a power supply, the thing of only small capacity which may start motor 2a₁ may be sufficient as storage battery 2b, and it charges it by dynamo 2a₂ if needed. It may replace with storage battery 2b, and a dry cell may be used, and it may be made to use it one by one for every predetermined time by the control section 1a in this case, using a sized cell two or more. Or if it enables it to magnetize the above-mentioned motor 2a₁ other than a dry cell using a solar cell, it is effective in making the life of a dry cell extend.

[0018]Drawing 4 is other examples of this invention further, and uses the manual type dynamo 3 as the power generation means 2a. In this case, it is good also as composition which controls the telephone 1 for the control section 1a to detect the operation of the manual type dynamo 3 as storage battery 2b being charge

disabling, and to send predetermined SOS call S.

[0019]Drawing 5 is an example of further others of this invention, and the portable wireless telephone 1 contains the power generation means 4 and the dry cell, or the storage battery 5. He is trying for the power generation means 4, a dry cell, or the storage battery 5 to extend the life of a cell by presenting with a power supply the circuits 6 and 7 where portable wireless telephones differ. Two or more above-mentioned cells 5 are used, and it may be made for each to be used for them, switching it one by one.

[0020]Drawing 6 is an example of further others of this invention, and the portable wireless telephone 1 contains the 1st storage battery 8 and 2nd storage battery 9, or dry cell 10.

[0021]If the control means 1a monitors the output level of the 1st storage battery 8, it uses the 1st storage battery 8 as a power supply when this output level is beyond a predetermined value, and below a predetermined value becomes, it will be switched to the 2nd storage battery 9 or dry cell 10 with the switch 11.

[0022]Thus, if two storage batteries are used switching them by turns, most opportunities which cannot use the portable wireless telephone by charge impossible can be lost. If one piece is a short time even when it is considered as a dry cell, it can cover charge impossible enough. Or only when an operation of the electric power of both a power generation means and a dry cell or a power

generation means is poor, the composition of using a dry cell as a power supply may be used.

[0023]

[Effect of the Invention]As explained above, according to this invention, the following effect is acquired, even when the portable wireless telephone of this invention can also make a storage battery unnecessary or it uses a storage battery.

(i) Since a storage battery is automatically charged by a power generation means, like before, the user is careful of the charging state and does not need to perform charge operation.

(ii) Since external charging power is not needed, even when charging power is not obtained in the open air etc., it can be used satisfactorily.

(iii) Even if it replaces with a storage battery and uses a dry cell, it becomes usable [time to be equal to practical use of a portable wireless telephone]. It becomes very cheap cell cost.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is a block diagram showing one example of this invention.

[Drawing 2] It is a block diagram showing other examples of this invention.

[Drawing 3] It is a block diagram showing the example of further others of this invention.

[Drawing 4] It is a block diagram showing the example of further others of this invention.

[Drawing 5] It is a block diagram showing the example of further others of this invention.

[Drawing 6] It is a block diagram showing the example of further others of this invention.

[Description of Notations]

1 Portable wireless telephone

2 Power supply section

2a Power generation means

2b Storage battery

2a₁ size motor

2a₂ permanent magnet type generator

3 Manual type dynamo